

Road Through a California Desert.

(Prepared by the National Geographic Society, Washington, D. C.)

ECOGNIZED roads in the United States total 2,862,198 miles, according to the state surveys accepted by the bureau of pub-lic roads. This mileage is in excess of 100 times the circumference of the earth at the equator.

The national government is authorized to aid in the enforcement of 7 per cent of this total or approximately 200,000 miles of road. Already an approved national system of roads to be built jointly by the nation and the states exists on 181,000 miles of road.

Since law requires it, roads of the national system are either trunk highways or important county roads. All trunk highways in a state connect with trunk highways in nearby states. All county roads approved for federal aid must connect with other roads.

Not for 70 years has the United States had a highway system. Not ever did it have a highway system like this one in the making. . There are more than 250 named highways. Today it is possible to go from New York to San Diego on the Pacific coast and never leave paved roads except for 150 miles out of the 3,-100. Yet in 1913 when one of the first of these great modern highways, the Lincoln highway, was conceived the original trackers found great difficulty discovering a through trail from Indianapolis to San Francisco. They had to search a way over fields and into barnyards. Projecting a Twentieth century highway was pioneering in the same sense that survey of the Oregon trail by Fremont and was pioneering. Before 1913 the United States had thousands of

roads but practically no highways. In many instances modern highways couple road archaeology with pioneering and engineering because 70 years ago the United States did have a net of turnpikes for overland travel. The new system overlays an old one much as modern Rome does ancient

Trail Systems of Indians. If one excludes the railroads and sticks to the paths for personal and private travel, the Indians may be said to have had a better highway system than the United States had before the present autometive revolution. Continuous Indian land trails once intersected the continent. The Iroquois ranged as widely as a "tin can" tourist. If their council at Onondaga in the midst of New York's Finger lakes ruled that a scalping expedition was in order, there was a usable trail for that purpose leading to the country of the Illinois.

Many tribes east, west, north and south hundreds of miles away hunted h Kentucky. They journeyed by recognized but not blazed trails. The blazed trail, the forerunner of "blazed" lephone posts, was the invention of the early white trader.

Engineering by instinct traced the trails of the Indian and the buffalo. white ploneer used the Indian and the buffalo trails and added some of his own. Comparing the work of the Indian and the pioneer, with the modern highway system, it appears that the Indian has contributed more routes than the pioneer.

Some modern highways which follow on or near the route of an Indian trail are: Mohawk trail, New York; Dixle highway in the Middle West trun Paw Paw, Mich, to Logansport; the Hoosier trall in Indiana; the Grant highway west of Chicago; the River to River highway west of Chicago; the Egyptian trail, Chicago to Kaskaskia; Dixie highway from Lima,

Ohio, to Cincinnati; the Michigan, Detroit, Chicago highway; the Lakes to Sea highway from Erie to Franklin in Pennsylvania: National Roosevelt Midland trail in West Virginia; the National Old trails from Cumberland to Uniontown, Pennsylvania; Boone way and Lee highway in Kentucky and Tennessee; the Yellowstone trail in Ohio; the Atlantic and Pacific high-

way in West Virginia, and the Lin-

coln highway in Ohio. It was possible a few years ago, it is said, to go from Chicago to New York by street car and interurban electric car. The twisting and turnings necessary were astonishing and the number of transfers astounding. But the difficulty was probably not greater than going from New York to Chicago by road. For 70 years from the date of early expansion of the railroad, the American system of highways had gone to seed. The Lincoln highway survey party found only 256

miles of the 3,000-mile route paved. When a board of directors holds an annual meeting at the close of the year it contrasts the year's figures, profits, production and purchases with the year before and the year before that. No such picture of the American road system can be obtained. There is a skip of three or four generations which are blank.

Precedents in Road Travel.

The automobile engine, of course, has no precedents. But nearly everything else about road travel has-if one goes back far enough. The coach in which tourists ride serves the same purpose that a coach did in 1830. Wheels are wheels, but with a difference, National highway maps have their primitive ancestor maps. The road tavern is being rebuilt on foundations deserted for nearly a century. Trucking vehicles clutter the highways again for the first time since pre-railroad days when files of trucking wagons toiled along in half-mile

The most noticeable difference between a map of American highways today and American highways in 1830 is that the center of travel has changed. Every tourist knows that the densest grid of highways today is in north central United States from Pittsburgh west to Chicago and to St. Louis. The pioneer highway system and the Indian and buffalo trail systems before that centered on a state now not conspicuous as a tourist goal. In those times nearly all roads led to or through the "dark and bloody ground" of Kentucky.

Virginia and her sister states ploneered the Middle West. New England civilized it. The southerners broke roads, sent the Indians West and laid out farms. Northerners came out and built towns, factories and churches. But when New England flooded the Middle West, the railroad had penetrated to Chicago and steamboats carried them through the Great Lakes. Two routes were opened by the Virginians; one through Cumberland City on General Braddock's road of sorrow and the other through Cumberland gap at the southwest corner of Virginia 350 miles from the city of Cumberland. Cumberland gap was for years the crossroads of the Alleghenies and that is why Kentucky on the western side of the gap once held the honor of being the highway center of America.

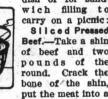
When the highway system of the Middle West was wiped out by the railroad, it sprang up as if transplanted on the other side of the Mississippi. The covered Conestoga wag-

The KITCHEN CABINET (6), 1926, Western Newspaper Union.)

The person who looks back on his life and says, "I have done nothing to regret." has lived in vain. The life without regret is the life without gain. Regret is but the light of fuller wisdom from our past, illuminating our future.

SEASONABLE GOOD THINGS

Here is a nice dish of meat to serve sliced cold as a luncheon or supper dish or for sand-



carry on a picnic: Silced Pressed Beef.—Take a shin of beef and two pounds of round. Crack the bone of the shin. put the meat into a kettle, cover with cold water and

bring slowly to a boil. Add salt and pepper, two tablespoonfuls of vinegar, a large onion sliced and cook all together until the meat falls from the bones. Skim out the meat and bone and reduce the liquor by boiling; when half the quantity, strair through a cheesecloth. Pick the meat from the bones in small bits. To the meat liquor add a pinch of powdered mace, cloves, allspice and cayenne and one-half teaspoonful each of celery salt and mustard. Boil the liquor and return the meat to it, mixing thoroughly. When well heated through turn into an earthen bowl or mold rinsed in cold water; cover with s weight and set away to cool.

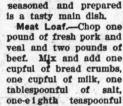
Simple Dessert.—Butter slices bread and place in a deep baking dish. cover with canned blueberries or fresh hot stewed ones. Cover and let stand an hour or two and serve unmolded or heat and serve hot with sugar and cream. Any juicy berries may be used in place of blueberries.

Eggs Scrambled With Ham.—Break three or four eggs into a saucepan add a little milk, seasoning of salt and pepper and butter, then add one half cupful of chopped cooked ham; stir until well mixed and serve with buttered toast and treed potatoes,
Sponge Pound Cake.—Beat one-half

cupful of butter to a cream, add the grated rind of a lemon and gradually beat in one-half cupful of sugar and beaten yolks of four eggs, one cupful of flour sifted with a tablespoonful of cornstarch and a teaspoonful of baking powder; lastly, fold in the stiffly beaten whites of the eggs and bake in a loaf 30 to 40 minutes. For a finegrained cake use one-half teaspoonful of baking powder; the texture of this cake is like sponge cake.

Everyday Food.

A meat loaf is often the most suitable way of serving meat to the family, and when properly seasoned and prepared



of pepper, and three eggs slightly beaten. Shape into a loaf, put into a baking pan and cover the top with thin strips of fat salt pork. Roast one and one-half hours, basting every ten minutes with one half cupful of water and the fat from the pan. Remove to the platter; pour around the loaf a tomato sauce and garnish with parsley.

Pimento Potatoes,-Season three cupfuls of hot riced potatoes with three tablespoonfuls of butter, onehalf cupful of cream and salt to taste. Add one and one-half cans pimentoes cut into small pieces and forced through a sieve, then beat until well blended. Reheat and pile on a hot

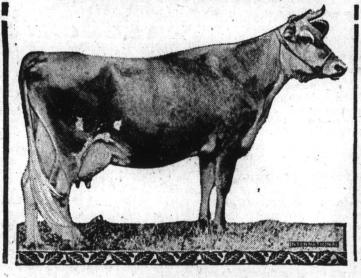
Coffee Junket.-A dessert which is wholesome, easy to prepare and dainty to serve: Take one junket tablet, crush and dissolve in a tablespoonful of warm milk, then add to a quart of lukewarm milk. Reserve half a cupful of milk and pour boiling hot over two tablespoonfuls of coffee; let stand until well-infused, then strain and cool before adding to the mik. Let stand in a warm place until the junket is set, then place on ice to chill. Serve with whipped cream.

Velvet Lemon Sherbets-This is one of the most popular of desserts. Take the juice of three lemons, add two cupfuls of sugar and one quart of rich milk, cream and all. Freeze. The mixture will curdle when being combined but will freeze so that it is as smooth as velvet.

Nasturtium Folds. - Mash wellwashed blossoms with creamed but-ter; spread very thinly sliced white bread with a thick layer of the butter. Score each and fold. Serve with iced

Necie Maxwell

Holds the Record for Butter Fat



Above is pictured Sophie's Emily, a prize-winning Jersey cow owned W. R. Kenan, Jr., of Lockport, N. Y. Her register of merit records show that she has given a total of 92,000 pounds of milk and 4,585 pounds of butter fat, more than any other cow has ever been credited with. She has been awarded four gold medals and one silver medal.

Americans Lead as Apple Eaters

High Grade Fruit, Well Sorted and Packed, Demanded in Markets.

(Prepared by the United States Departmen Although consumption of apples in the United States is less than the proverbial "apple a day," averaging about three apples a week per capita, the American people lead the world as apple eaters, according to the Department of Agriculture, which has been making a comprehensive study of the production and marketing of apples

sold in barrels. Estimates for the British isles aver age about two apples a week, and in most countries of continental Europe the consumption of apples is compar atively light.

The Big Producing States.

Three states—New York, Michigan and Virginia-produce nearly one-half the average commercial crop of the barrel region. Leading commercial main-crop varieties of the barreledapple region are Baldwin and Rhode Island Greening in the North; York Imperial and Winesap in the South and Ben Davis and Jonathan in the West. Leading fall kinds are Olden burg, Wealthy and McIntosh.

Cold storage, in most sections, has largely superseded common storage for long keeping of market apples Sometimes over one-fourth of the commercial apple crop is reported in cold storage at the height of the season. Barreled apples comprise about half the average stock in cold storage

The leading market for New York state apples are Boston, Buffalo, Cincinnati, Cleveland, Indianapolis, New ark. Philadelphia, Pittsburgh and Providence; Chicago and Detroit are the chief markets for Michigan apples Milwaukee, New Orleans, St. Louis and St. Paul for Illinois apples; Kan sas City, Memphis, Minneapolis and Omaha for Missouri apples, and Birmingham and Washington for Virginia apples.

Apples Rank First. Of the fruits exported from the work.

United States apples rank first in point of value, with total exports as fresh fruit for the year ending June 30, 1924, of 2,032,000 barrels and 6,198,-000 boxes, valued at over \$23,000,000. The United Kingdom purchases about three-fourths of our surplus apples. while the largest percentage of dried apples goes to the Netherlands, Gerand Scandinavian countries.

The increasing proportion of highout apples not well grown, well sort-ed and well packed. Only the product of the well-managed commercial orchards in sections with some advantages of climate, soil and location seems to have much chance to survive intense competition.

Complete details of the study have been published in Department Bulletin No. 1416-D, "Marketing Barreled Apples," copies of which may be obtained, as long as the supply lasts, upon request to the Department of Agriculture, Washington, D. C.

Reduce Stem Rust Harm

by Eradicating Barberry Thirteen states are now co-operating with the federal bureau of plant industry in the eradication of the barberry as a means of controlling the stem rust on grain. Dr. C. R. Ball, in charge of cereal crops and diseases, and Lind D. Hutton, associate pathologist, are now inspecting the barberry eradication work in Michigan, Ohio, Wisconsin, and several other states,

More than 12,000,000 barberry bushe have been destroyed in the thirteen states affected since 1918, and it is claimed by bureau specialists that there has been a reduction in stem rust damage over the entire area. The largest number of bushes have been found in the Great lakes states. It is said that they have caused a loss on an average of 50,000,000 bushels of small grain because of rust damage. The federal government and states have spent during the last eight years \$2,560,000 in barberry eradication

IN CERTAIN SECTIONS WINTER FIELD PEAS RETURN A PROFIT

Valued as Cover and Green hay, cover-crop, and green-manure pur-Manure Crop.

Winter field peas can be grown with rofit in certain sections of the country, says the United States Department of Agriculture, which has con ducted extensive tests in an effort to find winter-hardy varieties of these

Experiments with the Gray Winter and Austrian Winter varieties of the crop indicate a possible field of use fulness for winter peas in the Atlantic and gulf coastal plains and on the Pacific slope, according to Department Circular No. 374-C, "Winter Field Peas: Their Value as a Winter Cover and Green-Manure Crop." Gray Winter and Austrian Winter

peas when seeded in the fall have proved superior in hardiness to all other varieties. In orchards, cotton fields, or following tobacco where liberal quantities of fertilizers are applied in growing these crops, very little fertilizer is applied directly to the peas. Where the preceding crop has not been fertilized, 'a light application of avid phosphate or a low-grade bors and extending the complete fertilizer is beneficial. For ice by proper exercise.

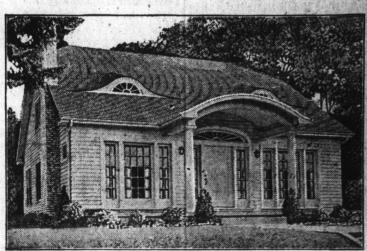
poses the seedings should be made as early after September 15 as weather and soil conditions will permit.

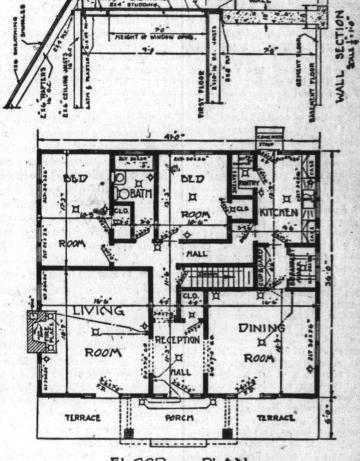
Although the accumulated data re garding winter peas are as yet unsatisfactory in many ways, results obtained in experiments, particularly those at Washington, D. C.; Corvallis Ore., and Tifton, Ga., are very prom-

A copy of Department Circular 374-C. which gives additional details concerning the experiments with winter peas carried on in several states, may be obtained free, while the supply lasts, from the Department of Agricul ture, Washington, D. C.

Increase Cow's Production

Increased production by pure-bred daughters of good cows proves the value of good blood in increasing the production in herds where the dams are already high-producing cows lize good proven stires by maintaining records of production on dairy herds, exchange of mature sires with neigh bors and extending the period of servBungalow of Pleasing Appearance Makes Good Home for Small Family





FLOOR-PLAN STALE 4-1-0

By WILLIAM A. RADFORD Mr. William A. Radford will answer juestions and give ADVICE FREE OF questions and give ADVICE FREE OF COST on all problems pertaining to the subject of building, for the readers of this paper. On account of his wide experience as editor, author and man-ufacturer, he is, without doubt, the highest authority on the subject. Ad-dress all inquiries to William A. Rad-ford, No. 1827 Prairie avenue, Chicago, Ill., and only inclose two-cent stamp for reply.

How many times have you seen a bungalow that seemed to be all roof and entrance? How many people have a decided prejudice against the bungalow because of seeing so many that had just this appearance? In designing the small house, and especially the bungalow, the roof and the entrance are of the utmost importance. They should receive the most careful consideration to assure that they will be thoroughly in harmony and proportion. If this is done the unfortunate

effect referred to will be avoided. Because of its lowness, with the roof close to the level of observation. the bungalow must have its roof properly broken to avoid too great and monotonous an expanse. Notice the house shown in the photograph. Here we see a roof down close to the eye, the full width of the house and running back to the ridge. Here, however, the peaks of the two gable ends have been cut off, two eyebrow windows break into the, roof, and the entrance roof, as well, offers a break in the expanse.

While the entrance is large, heaviness has been avoided, and in this way the entrance detail is in no way out of proportion to the house. cause of this treatment of roof and entrance, no observer will feel that this bungalow is all roof and entrance. In fact the whole effect is particularly pleasing one. With the placing of the central entrance, the two eyebrow windows and the French deors at either side of the entrance,

perfect balance is attained. Inside this small home, good design equally apparent. square space lends itself easily to a compact and efficient floor plan and, s a result, we have within the 36 by 41-foot walls, far more than one might expect.

Entrance is made into a central reception hall from which a passage leads to the rear portion of the house

and arched doorways open into the side. This living room is of a comfortable size, 161/2 by 191/2 feet with a fireplace at one side and a group of French windows at the front. dining room is somewhat smaller, of ample size, and it, too, has French windows at the front, while side windows in place of the living-room fireplace, makes it bright and cheerful at

To the mear of the dining room there is a passage with built-in cup-board and a breakfast nook connecting the dining room with the kitche beyond and, at the same time, affording a desirable separation. The small compact kitchen is thoroughly modern in every detail with built-in cases and a pantry where the refrigerator may

The remainder of the rear portion is occupied by two bedrooms with a bathroom between. These are both rooms of medium size, each with a large closet and with good cross ventilation made possible. These rooms, as well as the kitchen, open off of a rear hallway and from it a stairway leads to the basement below.

Simple Case for Books

Is Latest Convenience It is quite the thing nowadays to tuck away a set of bookshelves in odd nooks and corners of a living room.

On each side of a window or fire place they are especially cozy-looking. Doors are dispensed with, and the inwashable enamel, so that it is kept clean easily.

It is becoming popular to have the interior of the case painted in se bright color, repeating or emphasizing some note in rug or draperies or lamp-shade. The exterior of the case usually is painted to match the woodwork of the room-cream, white or pale

Use of Stone

The proper use of stone requires careful consideration and study. In selecting stone for the walls of a building three important qualities must be considered; the nature of the stone, its texture and color.